Nebraska Information Technology Commission Community Technology Fund 2001

Application Form

Section I: General Information

A. Project Title: Web Student / Volunteer Production Project (WSVPP)

Name of Submitting Entity: Nebraska Game & Parks Commission
Project Contact Information: Lake McConaughy State Recreation Area
Mitch Gerstenkorn, Park Superintendent II

 Address:
 1500 North Hwy 61

 City, State, Zip:
 Ogallala, NE 69153

 Telephone:
 (308) 284-8800

 Fax:
 (308) 284-8802

E-mail Address: neparks@megavision.com

B. Certification for Request

I certify that to the best of my knowledge the information in this application is correct and that the application has been authorized by this entity to meet the obligations set forth in the application.

Section II: Executive Summary

Lake McConaughy State Recreation Area, Visitor / Water Interpretive Center is in need of Technological Computer and Video Equipment. Through area schools, volunteering activities and local businesses, we will be allowed to do many projects related to the area and its natural resources. Through projects and activity workshops, these students / volunteers will be able to make education technological productions that will be shown over the agency web site and through everyday visitor center theater productions. This will also enable the visitor center to become uplinked with other public schools, colleges, libraries and other parks throughout the nation / world and connect to them to share our projects with the entire internet digital community. With each new participation group, size and variety of online collections and showable programs, our library of interagency resources will expand to more fully meet the online demands of the ever-growing technologically educated audience. We would also like to work with local businesses by having workshops showing them how to develop their own web sites. Currently, Lake McConaughy S.R.A. Visitor Center is in the process of starting its educational / interpretive programs, and the need to get this system up and running as soon as possible is imperative to be as beneficial, not only to the immediate area, but also the technological and natural resources, is as important as ever. Even though Ogallala is a relatively small rural community, the impacts of this system will definitely be felt digitally worldwide.

The Project needs a team of Laptop Computers, a Digital Recording Camera and a LCD Projector with Components. The computers and camera will allow the project users to team together to document their project activities and accomplishments and build educational programs that will allow them to share their work with our visitors, their peers and the world, while giving them something to be proud of. The projector will allow us to accomplish both on-site and portable presentations. We will not only be able to show the everyday public the programs they have produced, in the Big Mac Community Room at the Lake McConaughy S.R.A. Visitor Center, but also, we will be able to use the portable projector, allowing us to do educational / interpretive presentations at schools, with the public and other needed interagency presentations. With the many needs of this technology, we foresee that the project will fulfill many aspects needed to complete our new center.

Section III: Goals and Objectives

1. The Mission of the Lake McConaughy S.R.A., Visitor / Water Interpretive Center is:

→ <u>EDUCATION</u> of our citizens about the need for cooperation in the management of a limited Platte River resource to satisfy an unlimited number of needs!

Goals

- Awareness of the Platte River's cultural, natural and economic importance.
- Appreciation of the many benefits of the Platte River and the Ogallala Aquifer.
- <u>Understanding</u> the responsibilities of the Nebraska Game and Parks Commission, the Central Nebraska Public Power and Irrigation District, the Nebraska Public Power District and other resource agencies and organizations in the management of these precious resources.

The overall goal of this project is to increase Awareness, Appreciation and Understanding of a limited Platte River Resource. This will be done through youth programs and volunteer projects that build

educational natural resource-related video technology programs for the World Wide Web, and also actual public programs within the visitor center. This project has a scope of one year. However, we look at this project as the start of a much larger project between the school and the community with a larger scope to promote this overall video / internet legacy. In future years we hope to work cooperatively with area schools and community volunteers to advance computer / world wide web literacy to bridge the digital divide.

This Project's Overall Goals

- Training Students / Volunteers
- Training Local Business Owners How to Develop Small Business Web Sites
- Increasing Volunteer Interest
- Improved Computer Literacy
- Launch a New Online Presentation Web Page
- Educate Students about Practical Uses of the Internet for Accessing Our Agency Site and the other Accompanying Government Resources
- Measure Site Usage Rates by the Hits that Our Site Experiences
- Beneficial Aspects to the Community / State / World

Training Students / Volunteers

Through these developed programs, students will be motivated to develop presentation developmental skills. They will also be obligated to work in an educational atmosphere that is driven by technological teamwork skills. The skills they develop will be irreplaceable and can be used to solve some of life's everyday problems. The programs that are developed by these students / volunteers will be shared both on the world wide web, the visitor center Big Mac Community Room, and through the Ethyl S. Abbott Theater. This will be simply one more avenue that these programs can be witnessed through.

A specific example might be that a group of students, teachers, and parks personnel might cooperatively produce a computer enhanced digital video presentation that helps to highlight the sometimes conflicting needs regarding the water resource. Research with the irrigation / agriculture contingent, the hydroelectric generation contingent, the recreational industry contingent, the ecological impact contingent (both in groundwater impact and endangered species / wildlife influences) will take place. The group will collaboratively collect and produce the data to potentially have audio / visual presentations that will educate all interested parties about the conflicting and important needs. The potential for future reduction of conflict alone makes the project exciting. In addition to a project for sharing, the group itself becomes educated, knowledgeable "ambassadors" that can be the critical first step toward successful resolution of natural resource management conflicts.

Training Local Business Owners How to Develop Small Business Web Sites

By assisting local business owners with development of business web sites, we feel that we have the ability to promote Ogallala and the surrounding area. We feel that giving community members the power to boost the local economy will give everlasting benefits to everyone. Smaller businesses are sometimes apt to be left behind when it comes to technological advances. This program would allow them to become updated technologically, that will in turn advance their small businesses in this "dogeat-dog" world.

Increasing Volunteer Interest

We hope to be able to reach both students ($5^{th} - 12^{th}$ grades) and volunteers (ages 18 +) with this program. In this nature the program will reach a wide scope of people, which in turn will aid us in development of programs that can be used as visitor center programs for the corresponding age groups. We also plan to solicit and support the participation of education leaders in the area, (teachers, administrators, etc.) who will help coordinate activities and provide leadership and direction for youth participation, as well as logistical feasibility.

Improved Computer Literacy

Our youth seem to be quite computer literate in this day and age, while adults seem to lack some of the basic computer based knowledge. This program will simply integrate volunteer projects and student projects to increase everyone's, awareness and educate them on how to design beneficial public presentations.

Launch a New Online Presentation Web Page

These designed presentations will be displayed on an agency web site that can be accessed by anyone with computer / modem access. These presentations will increase the public awareness of certain projects at the visitor center, giving volunteers a way to show their accomplishments to family & friends, serve as another avenue for Lake McConaughy area promotion, and another avenue for increased park public relations.

Educate Students about Practical Uses of the Internet for Accessing Our Agency Site and the other Accompanying Government Resources

Through the interaction between students and the program, these students and volunteers will have an increased awareness of the world wide web, Lake McConaughy S.R.A. and Nebraska Game and Parks Commission. The skills that students / volunteers acquire through this program will be skills that the individuals will be able to use in the future as long as the Internet keeps carrying the information for our future.

Measure Project's Success by the Hits that Our Site Experiences and Return Volunteers

This project's success can be accurately measured simply by checking the number of hits that our web sit will experience and the number of students / volunteers that return to work on future projects. In addition, written and / or e-mail evaluations of the experience by the participants will be the final act of each project. These participants become an excellent demographic group for future assessment of project impact.

Beneficial Aspects to the Community / State / World

This project will benefit the community, state, and world in a many ways. This project should make volunteering more prevalent within our community. It should increase student / volunteer education levels with respect to computer / internet literacy rates. People from all origins and all regions of the world will be able to access our programs via the world wide web and see what benefits these students / volunteers are attributing to our nation's natural resources. With one more site on our web page, it should increase the interest levels in Lake McConaughy S.R.A., which should indirectly bring more income into the community. This project will form relationships between other park systems, which will no doubt channel new ideas from other parks for our future uses.

By promoting these visitors to learn resource management, conservation, preservations and the ever

prevalent environmental concerns through the use of technology, they will be learning a lot more than if they were simply doing the projects alone, and because of these added programs, they will be able to share their contributions with the world. With the Lake McConaughy Visitor Center already in place, the demand for ongoing technological advancements in the field will always be present.

This agency operates through the State of Nebraska's Game and Parks Commission, and by promoting more educational opportunities, we will be expanding our client base which in turn will cause our government to improve on efficiency & effective citizen access to our government's related information.

Simply by offering these opportunities, one is sure to expand access to lifelong educational and technological training opportunities to Nebraska's citizens, giving many people hands on technological learning experiences. This is simply one more service that we will offer in order to enhance services to our community, visitors and citizens.

The outdoor projects these students / volunteers develop and complete will reduce our direct project cost, and when completed these persons will feel a sense of ownership. This sense of ownership will indirectly cause a heartfelt need for the protection of our natural resource base.

As we proceed into the new millennium, striving to be better stewards of the natural resource gradually becomes more and more critical to our survival. If we can work to improve communications between all the parties, if we can take advantage of the improvements in communication that technology has to offer, and if we can help to improve public education and awareness of the key issues and critical decisions at stake, then the beneficiaries no doubt include the participants, and the area businesses, the consumers of electricity and agricultural products, the users of air, water and the rich natural resources we have available – clearly, we will all become the beneficiaries.

Section IV: Scope and Objectives

1. Beneficiaries

The beneficiaries of the project are students, volunteers, area small businesses, parks staff, teachers, school administration, the family and friends of the students / volunteers, the internet audience, the world's park system and many other indirect beneficiaries too numerous to mention.

2. Expected Outcomes

- Overall Increased Internet Literacy
- Students / Volunteers Educated on Design and Implementation of Meaningful Educational Presentations that are Applicable for Business and Personal Applications.
- Small Businesses having the Capability to be on the Cutting Edge of Today's Technology
- An Increased Rate of Community Volunteering Due to an Increased Exposure of Lake McConaughy Projects
- Designed Educational Presentations can be shared with Everyone from the Local Community to the Internet World
- Participants Ability to Experience and Explore the Entertainment and Business Uses of the World Wide Web

- Participants will Acquire the Knowledge and Ability to use the Internet as a Research Tool for Life Long Learning Opportunities
- Direct Benefits to Lake McConaughy and the Surrounding Communities Due to Increased Public Awareness through these Projects

3. Measurement and assessment methods to verify project outcomes:

Since Lake McConaughy S.R.A. Visitor Center is new and volunteer rates at the Lake have been relatively small to virtually nonexistent, we will be able to measure this project quite easily through:

- 1) Number of Project Participants (overall participation levels)
- 2) Number of Return Participants (this will show how positive the experiences are)
- 3) Number of Hits on the Developed Site (outside interest levels)
- 4) Number of People Present at Project Presentation Showings (community interest levels)

Some of the greatest outcomes of this project will be virtually impossible to measure. Other than the number of hits the web site receives, it will be extremely difficult to measure the levels of positive impacts from outside (non-participant) visitors, either to the web site or to the actual site of the park. However, e-mail communication from national and international visitors continues to increase. We expect that we may be effective in soliciting e-mail input from causal visitors with a variety of tools, such as a "Comments" box on the website.

4. Significant constraints of the project

This project has minimal constraints:

- The only constraint to this project is getting an able bodied group of students / volunteers to feel the need to follow through on the needed projects. Though this is a recognized constraint, we are confident our schools and community members will come through to complete, not one, but many projects. When presented with the opportunity to engage in these projects, learn new technology and increase ones feeling of self, we feel confident that this project will present itself as a quite appealing opportunity to many participants. We also hope that the leadership provided by teacher/administrator volunteers will help in this area.
- Increased need for staff will be a minimal constraint upon the project. Although we feel that this is not a significant problem.

5. Significant assumptions relating to the project

At the current time we do not foresee any significant assumptions that need to be addressed in order for this project to be anything but a complete success.

Section V: Project Justification

1. Cost / Benefit analysis

A cost benefit analysis is not applicable to this project because the benefits of this project are intangible. However, with nearly one million on-site visitors, and an ever-growing number of internet "cyber-visitors", the potential seems obvious for all involved.

2. Impact on customers, clients and citizens

Increasing the knowledge and comfort level that our participants have with using the internet, digital cameras and computers, will in turn decrease that known "technological fear" of using this important technology. At the same time, this will increase the quality of Lake McConaughy web site and give the total internet audience a better understanding of Lake McConaughy and the Nebraska Game & Parks Commission as a whole.

The opportunities of participants to display their work (without the community, family and friends having to come to the site) promotes pride in our participants and community. It also motivates intergenerational, interagency and intra-agency communication, which will promote use of the internet in a park atmosphere that will serve as the building block of natural resource protection through technological education.

The critical issues of natural resource management, hydro-electrical power generation, agriculture, and tourism economy (and other issues as well) all are enhanced by increased understanding of the key information.

3. Impact the new system will have on current problems and how it will impact the entity's policies, procedures, standard, staffing, costs and funding:

These projects will increase a sense of ownership of projects in participants' hearts and minds. This created sense of ownership will in turn increase resource projection, which will decrease resource exploitation and vandalism.

A desired impact of the whole project on the current problem of natural resource management is also expected. The complexity of issues as critical as groundwater management, wildlife and endangered species awareness, irrigation and agriculture, outdoor recreation, fragile ecosystem protection, and economic concerns is enormous. Efforts to educate youth as "ambassadors" of understanding hold tremendous potential for problem reduction and public benefit.

Park administrators will oversee these projects and develop a clear policy of what is and what is not acceptable web content for natural resource based park related web links.

While this project will be new in many ways, both technological and amount of involvement at Lake McConaughy, it will fulfill both the mission and goals of Lake McConaughy, the Nebraska Game & Parks Commission and Nebraska Information Technology Commission.

4. Other solutions that were evaluated and why they were rejected. Include their strengths and weaknesses. Explain the implications of doing nothing and why this option is not acceptable.

Not creating these projects is an option. This would open park staff up to other matters and leave more money in our operations budget for other projects. Although, doing nothing is only an option

if we were to abandon our mission statement of Education on Resource Protection and resign ourselves to leaving our participants behind in a world that they cannot afford to be behind in.

In the past Lake McConaughy has had a handful of volunteer related projects and they have been roughly unsuccessful mostly do to project awareness. This new way of promoting project participation will hopefully increase the amount of volunteer projects we are able to implement and complete.

5. The project's compliance with any state or federal mandates. If yes, please specify the mandate being addressed.

There are no mandates served by this project directly.

Section VI: Implementation

1. Project sponsor(s) and stakeholder acceptance analysis:

Lake McConaughy S.R.A. is the stakeholder, and the fiscal agent is Nebraska Game & Parks Commission.

2. Define the roles, responsibilities, and required experience of the project team

Environmental Educator / Interpreter: Mr. Mitch Gerstenkorn

Mr. Gerstenkorn is the Lake McConaughy Park Superintendent II (Supt. Assistant), and is currently a fulltime employee of Nebraska Game & Parks Commission. Mr. Gerstenkorn will oversee the projects, assist the volunteer / students in project development & presentation design, will act as the head of web site design and present these completed presentations at the visitor center community room, theater, school, and other civic venues.

Assistant Environmental Educator: Mr. Dave Hastings

Mr. Hastings will assist Mitch with technological program development and presentation posting and showing.

> Teachers of Active Schools

Teachers are asked to be directly involved with their students in development, research and completion of these projects. This involvement will help coordinators oversee the volunteers.

3. List the major milestones and deliverables for each milestone.

Projects at Lake McConaughy are dependent upon the weather and the current season.

Milestone #1: We are awarded the funding! (Immensely appreciated, and now it is time to roll up our sleeves!)

Spring – Summer: including the months of March – September

- Publicize the program and current project to the public and area schools
- Start web site set up preparations
- Plan project layout
- Start project as soon as possible
- Complete the current project (by the end of May) and move to presentation development
- Advertise a posting date for the presentation and start showing the presentation in the community room and the theater by mid-summer.

Milestone #2: One major project / presentation completed

Fall – Winter: including the months of October – February

- Plan and Advertise a Natural Resource based Presentation to be developed
- Recruit the needed volunteers and or students
- Present basic ideas and give volunteers / students time for research
- Narrow topics and start in-depth research
- Rough presentation development
- Detail presentation
- Complete and post presentation for both internet and theater
- Conduct One of the Small Business Web Page Seminars

Milestone #3: One or Two presentations completed

Special Notes

- Projects / presentations may be done in phases (ex. A Nature Trail -- #1 design, #2 construction, #3 landscaping and #4 addition of educational / interpretive aspects), each one of these prospective phases can be a separate project
- Current thoughts are to complete 1 major summer project / presentation and 2 winter presentations

4. Training and staff development requirements and procedures

Training will be minimal. The only training needed will be from in-house staff. Most of the staff being used is already professionally trained on the required technologies needed for equipment and web site construction.

5. Maintenance and on-going support requirements, plans and provisions.

Maintenance will be minimal on completed projects, and maintenance can be used as another project down the road (ex. trail maintenance).

Section VII: Technical Impact

1. Describe the hardware, software, and communications requirements for this project. Describe the strength and weakness of the proposed solution;

Web page development and image editing software will be required. The most applicable software for this project would be the Microsoft Frontpage 2000 for Windows. This program enables us to create the professional looking web pages that we are in pursuit of for these projects. The project will also need the following hardware:

- 1) 5 Gateway Solo 5300 XL Laptop Computers
 - 14.1" XGA TFT Color Display
 - 6.0 GB Ultra ATA Hard Drive
 - Microsoft Windows 98 2nd Edition
 - Intel Pentium III
 - Internal V.90 56K Modem
 - 64 MB SDRAM Memory
 - Full-Size Keyboard
 - 3.5 Floppy Diskette Drive
 - Digital Photography Solutions Package Starter Kit
 - Modular 10x min./24.max. CD-ROM Drive
 - IOMEGA 250MB External USB Zip Drive w / 250MB Zip Disk
 - High-Capacity Lithium Ion Battery

2) 1 – Sony CPL-PX30 LCD Projector

- 2400 ANSI Lumens
- 3-D Gamma Correction
- RGB Enhancer
- Advanced Auto Pixel Alignment
- Digital Zoom
- USB Hub Function
- On-Screen Display / Help Menu
- Remote Commander Unit
- Stereo Sound

3) 1 – DA-LITE Projection Screen

- Gable Construction Aluminum Legs
- Strong Square Steel Tubing
- Fabric Lock Octagonal Protected Screen Case
- "Keystone Eliminator"
- Telescoping Locking Extension Tubes
- White Matte Glass-Beaded Surface

4) 1 – Sony Cyber-Shot DSC-P1 2048X1536 3X Zoom

- Still & Motion Video Capabilities
- Universal Serial BUS (USB)
- Max. Resolution of 2048 X 1536
- Memory Stick Storage
- LCD & Optical Viewers
- 3X Zoom Lens
- Automatic Focus

All other Equipment is already in place at the visitor center or owned by the agency.

2. Rational for determining the selection and appropriateness of the proposed technology components to the needs of the users;

High quality technological components are needed in order to expose the students / volunteers to today's technology in this ever changing and technologically advancing day and age. This equipment will serve its purpose for years to come, but as you know, as rapidly as advancements are currently being made, we need to start with the highest quality equipment to stay on the cutting edge for any conceivable period of time.

Laptops are needed in order for the students / volunteers to channel thoughts in a conference room setting. This environment will promote both teamwork skills & development.

The LCD projector is needed in order to share their final projects with other visitors and parks, at the Big Mac Community Room.

The digital camera is needed in order to document these student's / volunteer's projects and tie their educational achievements to their developed presentations. This camera will also allow businesses to have pictures of their businesses and / or of themselves to make their web pages more personable.

The projection screen is needed in order to expose other people to the projects and to the students / volunteers.

3. Address the issues pertaining to reliability, security and scalability;

Technology coordinators will establish security measures with what is developed and presented within presentations themselves ensuring that their content is proper for both public viewing and the agency's mission.

4. Appropriateness of the key technologies to the State Technology Plan requirements regarding technical standards, guidelines and compatibly;

There are no implementations of equipment or telecommunication lines involved in this project that pertain to the State Technology Plan.

5. Compatibility with existing institutional and / or statewide infrastructure.

This project is confined to the Lake McConaughy S.R.A. and does not affect any outside infrastructure.

Section VIII: Risk Assessment

1. Describe the risk Assessment which has been performed on this project;

This project has been analyzed to forecast what areas of potential failure exist, and how the failure of that component of the project would affect the overall success of the project, and how project tasks and responsibilities should be assigned in order to prevent such failures.

2 & 3. List the identified risks, and relative importance of each, and Identify strategies which have been developed to minimize risk;

Equipment Failure or Malfunction

High Importance: This project is dependent upon functioning equipment and without the proper equipment, this project will cease to operate. Staff will be educated in the proper operation and be responsible for responding appropriately to equipment failures and rapidly pursuing corrective measures.

Lack of Student / Volunteer Participation

High Importance: Without the student's / volunteer's commitment to the project, the project will fail. We believe that the level of enthusiasm our students / volunteers potentially have that will in turn provide the participation levels that we need to make this project nothing short of a complete success. We will promote these projects to channel for increased participation and strong community interest.

4. Impact if project is not completed as proposed.

The worst possible outcome is that we would not reach our goals of a particular project. This is corrected by simply having another school or volunteer group take on the given project. In this case, one could develop a competition between the two groups to stimulate project motivation (of course everyone would come out as winners). In the worst-case scenario, we would be unable to complete a certain project. Some cases may permit total project withdrawal, but only as a last resort. Most projects could simply be finished by a secondary group or simply start an easier project that is less burdensome. Although these are all possibilities, we feel that with carefully thought and thoroughly developed projects we can insure these projects are a sure success.

Section IX: Financial Analysis and Budget (Required)

	CTF Grant Funding	Cash Match (5)	In-Kind Match (6)	Other Funding Sources (7)	Total
Personnel (1)			\$ 5,880		\$ 5,880
Contractual Services (2)					
• Design					
Programming and testing					
• Project					
management,					
evaluation, and					
quality assurance					

Other (2)						
Capital Expenditures (3)						
Hardware Acquisitions	\$ 22,775				\$ 22,775	
Software Acquisitions	\$ 135				\$ 135	
Network Cost						
• Other	\$ 420				\$ 420	
Other Cost						
Telecommunications			\$ 360		\$ 360	
Supplies and materials			\$ 200		\$ 200	
Other operating (4)			\$ 225		\$ 225	
Travel	_			_		
Total	\$ 23,330		\$ 6,665		\$ 29,995	

Financial Narrative Notes:

1. Please Include estimated number of hours of full-time equivalent (FTE) by position.

There will be approximately 2 park staff / coordinators and 2 teachers / adult leaders for each project that is initiated (I figured the average on a 3.5 average coordinator / leaders per project).

7 days / project X 3 projects / year X 3.5 avg. leaders X \$10 / Hr. X 8 Hrs. / day = \$5,880

2. Please itemize other contractual expenses on a separate sheet.

There are NO contractual expenses with these projects.

3. Please itemize capital expenditures by categories (hardware, software, network, and other) on a separate sheet.

Hardware

<u>Items</u>	Price	Quantity	<u>Price</u>
1) Sony Laptops	\$ 2,605	5	\$ 13,025
2) Sony Projector	\$ 8,895	1	\$ 8,895
3) Camera	\$ 855	1	<u>\$ 855</u>

SUBTOTAL \$ 22,775

Software

1) Microsoft Frontpage 2000 \$ 135 1 <u>\$ 135</u>

SUBTOTAL \$ 22,910

<u>Other</u>

1) Projection Screen \$ 420 1 <u>\$ 420</u>

TOTAL \$ 23, 330

- 4. Please itemize other operating expenses on a separate sheet.
 - 1) Shovels, trail surfacing material, vehicles, gas, electricity, dirt work, interpretive signage, etc.

 (Conservatively Figured) = \$ 225
- 5. Please indicate the source of any cash match.

The majority of the cash match will be derived through the thoroughly involved area volunteers and the Lake McConaughy S.R.A. project coordinators.

6. Please indicate the source of any in-kind match and how it will be documented.

The in-kind match is derived from project coordinators and school teachers giving their time (\$5,880). This will be documented by keeping a log of paid workers and their hours at each individual project. Other in-kind matches are derived from donated telecommunication links (\$360 value per year), and listed supplies and materials (paper, ink cartridges, data disc at \$200), and other operating supplies (shovels, trail surfacing material, vehicles, gas, electricity, dirt work, interpretive signage, etc. listed in the above #4 at \$225).

7. Please provide a breakdown of any other external funding sources. Sources of external funds may include grants from federal agencies or private foundations.

There are currently NO external funding sources at this time.